Vista Manager Network Appliance

Network Automation, Monitoring and Management

The Vista Manager Network Appliance (VST-APL) delivers state-of-the-art network automation, with integrated monitoring and management. Combining powerful applications for automating network management and security, and providing visibility with actionable reporting, reduces administration effort, complexity and cost.

VISTA MANAGER™
NETWORK APPLIANCE

Seamless network management

The Vista Manager Network Appliance (VST-APL) seamlessly integrates the tools for effortless management. Allied Telesis Autonomous Management Framework™ Plus (AMF Plus) and Autonomous Wave Control (AT-AWC™) centralize management and automatically optimize all wired and wireless network devices, while the SNMP plug-in supports third party devices. AMF Security (AMF-Sec) ensures a self-defending network. Vista Manager is a single-pane-of-glass interface to the entire AMF Plus, AWC, SNMP, and AMF-Sec network. VST-APL brilliantly combines these tools in a powerful yet simple management solution.

Flexible deployment

The VST-APL ships with Vista Manager enabled. Add capability and capacity with subscription-based licenses for AMF Plus Cloud, AWC plug-in, SNMP plug-in, and AMF-Security automation and management tools:

Vista Manager

Vista Manager provides a single-pane-of-glass interface to the entire network. The dashboard includes network details and status, event information, and a topology map.
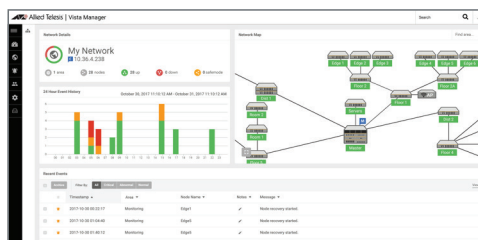
Critical issues, such as internal security threats, link tampering, network loops, environmental alarms, and failed nodes, are highlighted on the map and in the event log for easy resolution. An integrated Syslog server shows informative messages from network nodes and alarms on the network map, while asset management enables firmware and configuration backup and upgrade of one, many, or all devices.

The integrated SD-WAN orchestrator automatically optimizes inter-branch connections for secure application delivery.

The AMF Plus* orchestrator makes network management easy. Health monitoring provides at-a-glance visual network status, while simple graphical input enables LAN traffic management using QoS and ACIs. Easily create new inter-branch VPN connections, prioritize and shape application traffic over theWAN, manage security, and more. Effortlessly enable the network to support your business intent.

* AMF Plus intent-based features are not supported on multi-tenant networks.

AMF Plus Cloud

AMF Plus Cloud centralizes management of switches, firewalls, and routers across the network. Powerful features like auto-backup, auto-recovery, auto-provisioning, and auto-upgrade provide zero-touch administration for truly plug-and-play networking. An AMF Cloud Plus license also enables the AMF Plus orchestrator intent-based networking menu in Vista Manager, for performance driven and proactive management that helps prevent problems before they occur.

AWC plug-in

AWC enables management and monitoring of Allied Telesis wireless APs, with floor maps, wireless coverage heat maps, and client counts. AWC models AP location and signal strength, and automatically optimizes wireless output and channel selection for a superior user experience. Use innovative Channel Blanket hybrid wireless for a no compromise network with high throughput and seamless roaming, while AWC Smart Connect provides simplified deployment, and a resilient Wi-Fi solution using wireless uplink connectivity.

Multi-level wireless management

AWC Remote Monitor in Vista Manager EX centrally manages wireless networks that are controlled by Vista Manager mini deployments – including integrating floor and heat maps, and centrally storing all wireless logs for easy review.

AWC Sky Defender in Vista Manager EX detects the MAC addresses of BYOD devices connected to Vista Manager mini wireless deployments, which enables control of which user devices are able to access the network, as well as monitoring their connection status.

AWC Vista Appliance Storage (VAS) allows the history of wireless data, connection status, floor maps and more to be stored on a remote Vista Manager Network Appliance for a selectable time-frame that supports auditing and review as required.

SNMP plug-in

The Simple Network Management Protocol (SNMP) plug-in enables auto-discovery and management of a wide range of third party devices, which are displayed on the Vista Manager network map alongside AMF plus and AWC devices. Extend network monitoring and enable pro-active management with automated SNMP trap notifications and alerts.

AMF-Security

The AMF-Sec controller partners with best-of-breed firewall and security appliances. When the security appliance detects

**VISTA MANAGER™**   **AWC**   **AMF-SEC**

an internal malware threat, the AMF–Sec controller responds immediately to isolate the affected part of the network and quarantine the suspect device. Remediation can be applied so the device can re-join the network with minimal disruption. Responses are configurable, and comprehensive logging forms a clear audit trail. AMF-Sec avoids lost time and unnecessary disruption by enabling a self-defending network.

Vista Manager visual management

Multiple network map views enable visual and proactive management.

The color-coded traffic view shown below provides real-time visual status of network utilization and bandwidth across all links. The advanced view uses sFlow to show protocol use through the network. The color-coded traffic view shown below provides real-time visual status of network utilization and bandwidth across all links. The advanced view uses sFlow to show protocol use through the network.
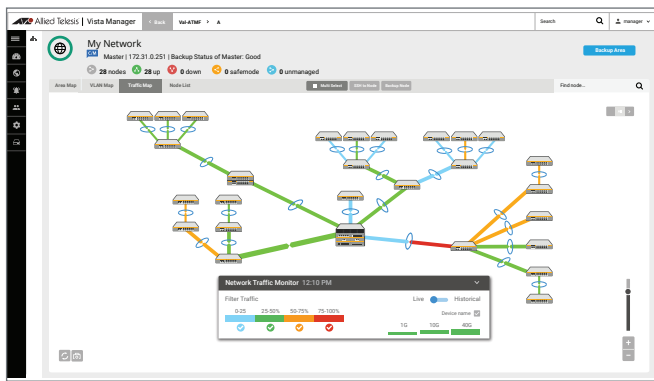

The VLAN view shown below enables simplified network management by creating VLANs across multiple switches with just a few mouse clicks.
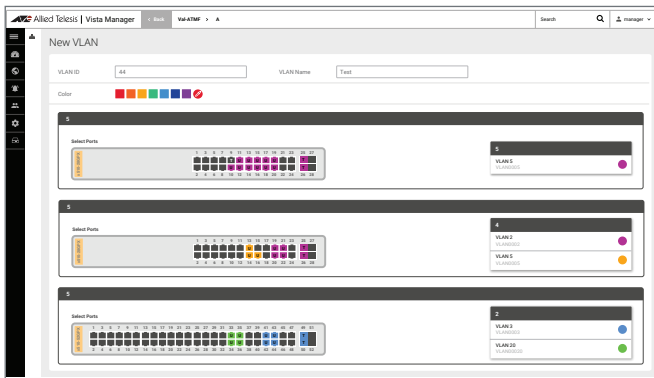
The Health Monitoring dashboard enables proactive management, with event actions that alert administrators of any issues via the network map or an email.

The Device Health tab shows at-a-glance status and trends for CPU, memory, storage, and temperature of Allied Telesis and third-party devices.

The Network Health tab shows device error counters and link health across the network.
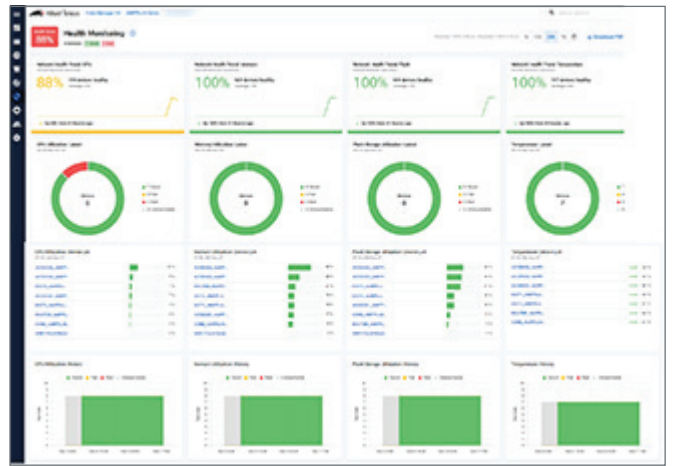

Wireless heat map

When using the AWC plug-in, the wireless concierge enables easy visualization with floor and heat maps, including client counts, with the 3D layered view allowing multi-dimensional signal management. AWC Smart Activation (AWC-SAC) intelligently monitors and manages signal transmission, and autonomously controls AP activation to provide the best possible wireless coverage and performance.
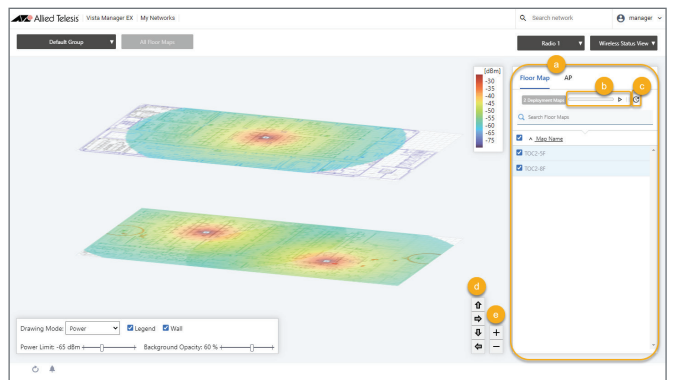
SNMP graphs

The Simple Network Management Protocol (SNMP) plug-in can acquire detailed information and statistics from a broad range of networking devices. Different views enable users to manage devices the way they prefer, and statistical information such as interface traffic can be graphed.

SNMP automatically searches for SNMP agents and displays each device found in tree form, for an easy view of the overall network topology. The SNMP plug-in is a powerful way to add management flexibility by supporting non AMF Plus devices.
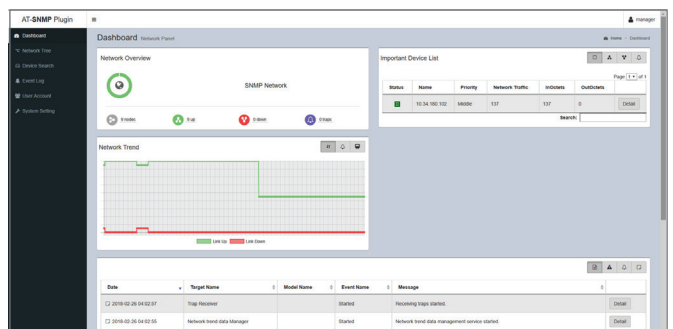
Secure SD-WAN

SD-WAN provides businesses with improved inter-branch network performance and reduced cost, by automatically optimizing application traffic over multiple WAN links between offices. SD-WAN uses our UTM firewalls and VPN routers for branch connectivity, to ensure secure transport of critical and sensitive data.

The SD-WAN orchestrator integrated into Vista Manager provides the ability to set acceptable performance metrics for any application, and load-balance traffic to meet requirements. By monitoring VPN link quality, time-sensitive or critical traffic is automatically switched over to the optimal link as required.

Visual monitoring enables easy management of the WAN, with the ability to drill down to specific links or applications to assess live and historical operation.
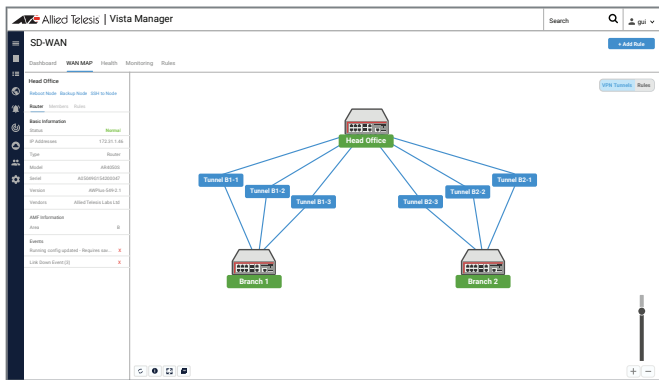
Intelligent edge security

View endpoints that do not have full authentication capability, but attempt network access, on Vista Manager's asset management page. Endpoints can then be allowed or denied access.
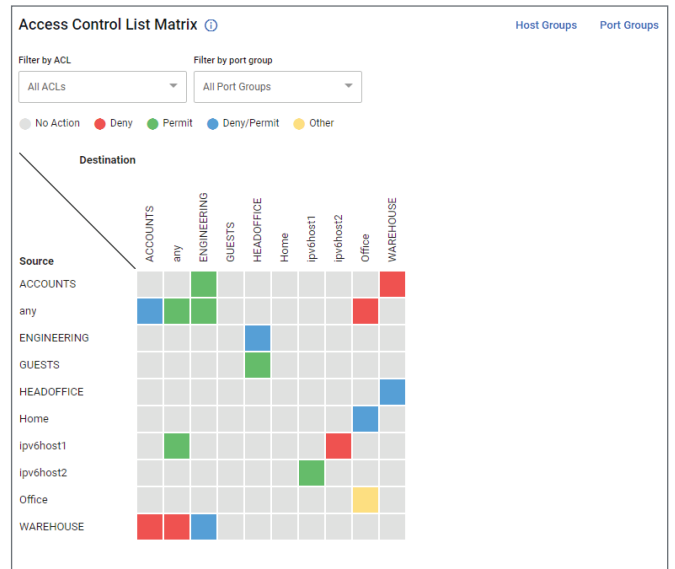

Intent-based AMF Plus orchestrator

The AMF Plus orchestrator enables effortless translation of business intent into dynamic network change to make network management easy. The AMF Plus orchestrator graphical interface supports:

▶ Dynamic creation of VPNs between locations with graphical drag-and-drop simplicity

▶ Prioritizing business-critical applications between office locations

▶ Shaping inter-branch traffic for maximum performance

▶ Breaking out cloud-based applications directly from the branch. Application databases can be shared from the head-office enabling breakout from a wider range of Allied Telesis branch-office end-points

▶ Simple setting of security levels for multiple locations

▶ Health monitoring of CPU, memory, storage, and temperature of Allied Telesis and third-party devices, with automated alerts to simplify fault resolution

▶ Monitoring link health across the network, including latency, jitter, packet loss, and interface status

▶ Managing traffic, and controlling the priority and performance of key applications right through the network, using centralized visual Quality of Service (QoS) administration

▶ Easily visualizing Access Control Lists (ACLs) in a matrix format to quickly and simply check for coverage inconsistencies, and ensure user data and different traffic types are managed in line with business policies

Easy visual ACL management with the AMF Plus orchestrator

Key Solution - Integrated wired and wireless network management
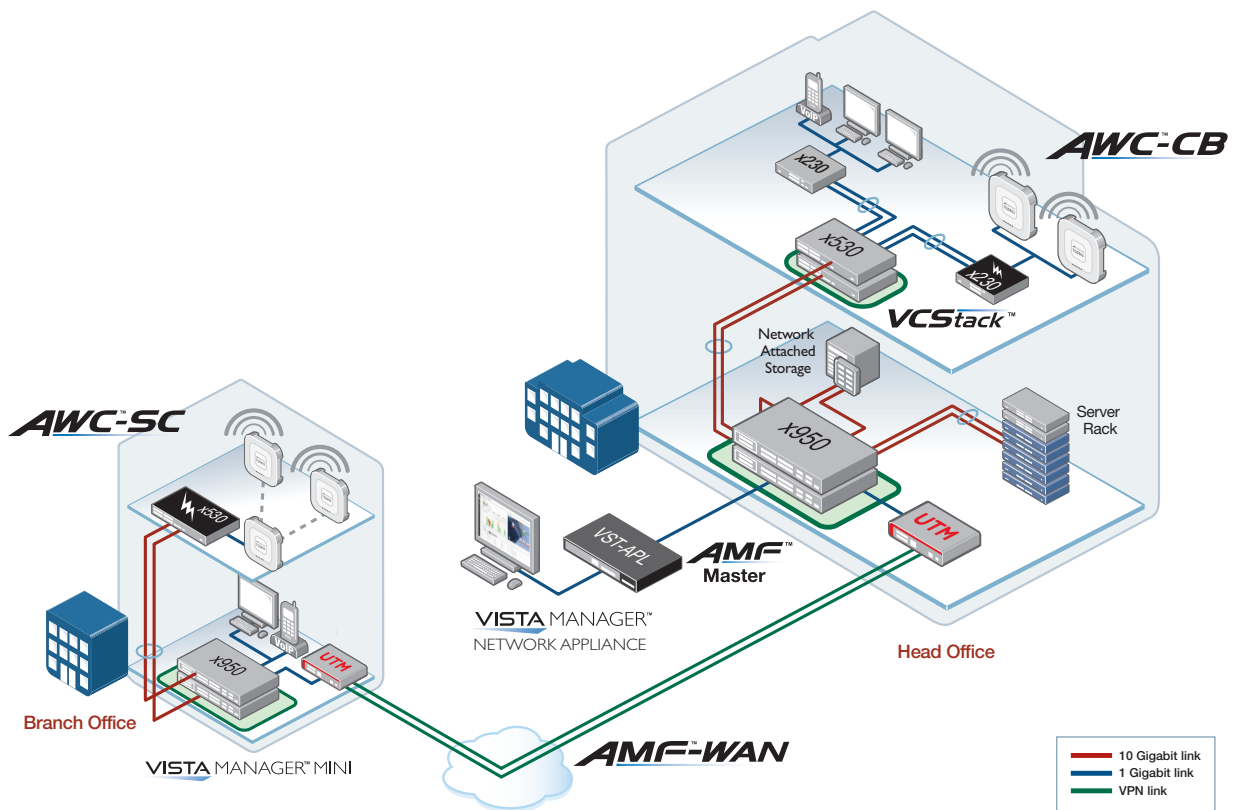
The Vista Manager Network Appliance (VST-APL) enables integrated management of the entire wired, wireless, and inter-branch infrastructure.

AMF Plus automates day to day administration of all switches and firewalls, with centralized management of one, many, or all devices, and features like auto-backup, auto-recovery, auto-provisioning, and auto-upgrade enabling zero-touch administration for plug-and-play networking. Complimenting AMF Plus, the SNMP plug-in supports third party devices for complete network management and monitoring.

AWC regularly analyzes the wireless network, and dynamically updates APs to deliver significant improvements in connectivity and performance, by automatically minimizing coverage gaps and reducing AP interference. AWC Channel Blanket (AWC-CB) provides a single blanket of wireless coverage for seamless roaming and always-on connectivity, while AWC-Smart Connect (AWC-SC) enables plug-and-play wireless network growth, as new APs only need a

power connection, and will then automatically create resilient wireless uplink connections to other APs.

AWC will also display and integrate APs that are operated by AWC-Lite, where local management is provided by Vista Manager mini on the branch office x950 switch. Logs for these remote APs are collected by AWC, to provide access to the operation and status of all APs across the entire network.

AMF-WAN (our SD-WAN solution) optimizes the performance of business-critical traffic for the best possible performance, and automatically uses the best path to maximize the operation of real-time applications – all with no administrator intervention.

With Vista Manager providing visual monitoring and management of the entire network, the VST-APL is a cohesive and powerful solution to support modern organizations, by meeting their business needs and intent with reduced complexity and cost.

Key Solution - Integrated security for a self-defending network

1. Targeted attack inside the network! Threat information is seen upline

2. Firewall sends threat notification

3. AMF-Sec instructs switch to shut down threat source

4. Infected device sent to quarantine

5. Security alerts shown on Vista Manager network map
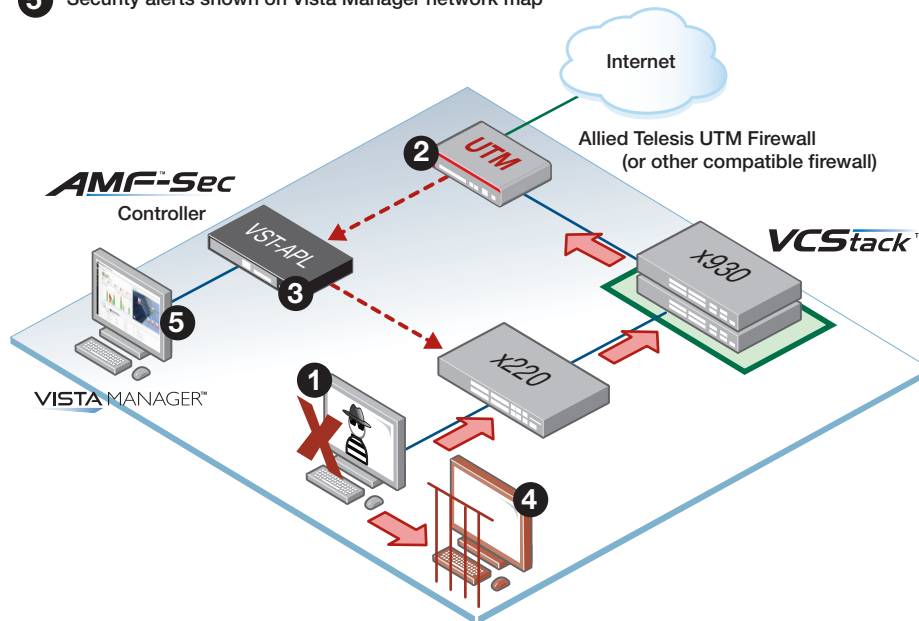
Block threats at the source

Most threat protection solutions are only capable of blocking suspicious external traffic coming through the firewall from the Internet—this is the traditional "secure border" model.

However, the AMF-Sec controller partners with best-of-breed firewall and security appliances. When the security appliance detects an internal malware threat, the AMF–Sec controller responds immediately to isolate the affected part of the network and quarantine the suspect device. By using the AMF Application Proxy, the AMF-Sec controller can communicate securely with Allied Telesis wireless APs as well as switches, to ensure any malware threats are blocked at the source whether they are from wired or wireless devices.

AMF-Sec provides visual alerts on the Vista Manager network map, to make finding the suspect device simple so remediation can be applied.

A self-defending network

AMF-Sec does not require administrator action to protect the network, as the controller automatically responds to any threats, whether malicious behavior, or even malware threats introduced inadvertently by staff with USB sticks, BYOD and so on. AMF-Sec can also block unauthenticated users from accessing the network to reduce risks to digital information, online resources, and business-critical applications.

AMF-Sec is an innovative security solution that can monitor traffic entering and traversing the local network, without introducing latency or bottlenecks. AMF-Sec helps organizations avoid lost time and unnecessary disruption, with automated security that enables a self-defending network.

Vista Manager Network Appliance | Network Automation, Monitoring and Management

Specifications

PRODUCT	10/100/1000T (RJ-45) COPPER PORTS[1]	100/1000/10GB (RJ-45) COPPER PORTS[1]	USB
VST-APL-06	6	-	2
VST-APL-10	6	4	2

Physical Specifications

PRODUCT	WIDTH X DEPTH X HEIGHT	WEIGHT	
		UNPACKAGED	PACKAGED
VST-APL-06	438 x 292 x 44 mm (17.24 x 11.49 x 1.73 in)	4.5 kg	7.5 kg
VST-APL-10	438 x 292 x 44 mm (17.24 x 11.49 x 1.73 in)	4.9 kg	7.9 kg

Power, Heat and Noise

PRODUCT	MAX POWER CONSUMPTION	MAX POWER DISSIPATION	NOISE
VST-APL-06	110W	375.4 BTU/h	29 dBA
VST-APL-10	150W	511.9 BTU/h	29 dBA

Operational Limits

AMF PLUS CLOUD		
AMF Plus Controllers supported		1
AMF Plus Masters per AMF Plus Controller[2]		60
AMF Plus Members per AMF Plus Master		300
VISTA MANAGER		
AMF Plus Areas[3]		1
AMF Plus Devices		300
SNMP Devices		1000
AWC remote wireless AP management	Vista-mini instances able to be connected to the AWC plugin	60 (AP logs retained for 366 days)
APs (whether directly managed or managed through Vista-mini instances)	System	500
	TQ Series APs	500
	TQm Series APs	100
Wireless Clients		3000
Channel Blanket (AWC-CB)	Total Blankets	20
	Blankets per AP	TQ5403/TQ5403e: 6 TQ6602: 32
	APs per Blanket	100
	Clients per Blanket	TQ5403/TQ5403e: 500 TQ6602: 320
Smart Connect[4] (AWC-SC)	Maximum APs	20
	Maximum hops	2
	Maximum APs per hop	4
AMF-SEC		
Locations		300
AMF Plus network devices		300
End user devices		5000
User device MAC addresses		5000
Policies associated with end user devices		5000

Environmental Specifications

- ▶ Operating temperature range: 0°C to 40°C (32°F to 104°F)
- ▶ Storage temperature range: -25°C to 70°C (-13°F to 158°F)
- ▶ Operating relative humidity range: 5% to 90% non-condensing
- ▶ Storage relative humidity range: 5% to 95% non-condensing
- ▶ Operating altitude: 2,000 meters maximum (6,561 ft)

Electrical Approvals and Compliances

- ▶ EMC: CISPR 32 class A, EN55032 class A, FCC class A, VCCI class A, ICES-003 Class A, RCM (AS/NZS CISPR 32), CE
- ▶ Immunity: EN55035, EN55024, EN 55035, IEC 61000-3-2, IEC 61000-3-3, ETSI EN300 386, ETIS EN300 132-2

Safety

- ▶ Standards: UL62368, IEC60950-1, IEC62368, EN62368
- ▶ Certification: UL, TUV

Restrictions on Hazardous Substances (RoHS) Compliance

- ▶ EU RoHS compliant
- ▶ China RoHS compliant

[1] The copper ports are used for management connectivity, and do not support network switching capability.

[2] Multi-tenant mode is not supported.

[3] While AMF Plus Cloud supports an AMF Plus controller and multiple AMF Plus areas (with an AMF Plus Master each), Vista Manager only provides visual management for a single area comprising 1 AMF Plus Master and up to 300 members.

[4] There are 3 levels of APs in an AWC-SC network: APs directly connected to a switch or router are Root APs, while APs at the edge of the AWC-SC wireless network are Terminator APs. Connector APs are deployed between the Root and Terminator APs.

AWC-SC supports a maximum of 4 Connector APs (at hop 1), and 16 Terminator APs (at hop 2).

NETWORK SMARTER

Feature Licenses

LICENSE	DESCRIPTION
AT-AMFCLOUD-PLUS-CTRL-1YR	1 year AMF Plus Controller 10 areas base/add-on license (maximum 300 areas)
AT-AMFCLOUD-PLUS-CTRL-5YR	5 year AMF Plus Controller 10 areas base/add-on license (maximum 300 areas)
AT-AMFCLOUD-PLUS-BASE-1YR	1 year AMF Plus Master license for up to 10 nodes
AT-AMFCLOUD-PLUS-BASE-5YR	5 year AMF Plus Master license for up to 10 nodes
AT-AMFCLOUD-PLUS-EX1-1YR	1 year AMF Plus Master 1 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX1-5YR	5 year AMF Plus Master 1 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX10-1YR	1 year AMF Plus Master 10 node add-on license (maximum 300 nodes)
AT-AMFCLOUD-PLUS-EX10-5YR	5 year AMF Plus Master 10 node add-on license (maximum 300 nodes)
AT-FL-VISTA-SNMP-1YR[5]	1 year license for SNMP plug-in
AT-FL-VISTA-SNMP-5YR[5]	5 year license for SNMP plug-in
AT-FL-VISTA-AWC10-1YR	1 year wireless controller (AWC) plug-in license for 10 APs
AT-FL-VISTA-AWC10-5YR	5 year wireless controller (AWC) plug-in license for 10 APs
AT-FL-VISTA-CB10-1YR-2022[6]	1 year Vista Manager AWC-Channel Blanket and AWC-Smart Connect license for managing up to 10 access points
AT-FL-VISTA-CB10-5YR-2022[6]	5 year Vista Manager AWC-Channel Blanket and AWC-Smart Connect license for managing up to 10 access points
AT-FL-SESC-BASE-1YR[7,8]	1 year AMF-Sec base license for 10 nodes
AT-FL-SESC-BASE-5YR[7,8]	5 year AMF-Sec base license for 10 nodes
AT-FL-SESC-ADD10-1YR[7,8]	1 year AMF-Sec 10 node add-on license
AT-FL-SESC-ADD10-5YR[7,8]	5 year AMF-Sec 10 node add-on license
AT-FL-SESC-ADD50-1YR[7,8]	1 year AMF-Sec 50 node add-on license
AT-FL-SESC-ADD50-5YR[7,8]	5 year AMF-Sec 50 node add-on license
AT-FL-SESC-ADD100-1YR[7,8]	1 year AMF-Sec 100 node add-on license
AT-FL-SESC-ADD100-5YR[7,8]	5 year AMF-Sec 100 node add-on license
AT-FL-SESC-ADD200-1YR[7,8]	1 year AMF-Sec 200 node add-on license
AT-FL-SESC-ADD200-5YR[7,8]	5 year AMF-Sec 200 node add-on license
AT-FL-AMFSec-BASE10-1YR[9,10]	1 year Base software including 10 node license
AT-FL-AMFSec-BASE10-5YR[9,10]	5 year Base software including 10 node license
AT-FL-AMFSec-ADD10-1YR[9,10]	1 year license for an additional 10 nodes
AT-FL-AMFSec-ADD10-5YR[9,10]	5 year license for an additional 10 nodes

[5] If your AlliedWare Plus network is running AMF Plus automation and management, then the SNMP plugin is automatically enabled in Vista Manager with no license required. If the network is running the older AMF automation and management, then the Vista Manager SNMP license is required

[6] Channel Blanket and Smart Connect require an AWC-CB license, an AWC license, and a Vista Manager EX base licenses to operate. Channel Blanket is supported on TQ6702 GEN2, TQ6602 GEN2, TQ6602, TQ5403 and TQ5403e access points. Smart Connect is supported on TQ5403 and TQ5403e access points

[7] This license is only available with the software version up to 2.2.x.

[8] AMF-Sec version 2.2.x runs on CentOS

[9] AMF-Sec version 2.3.x runs on the hardware-based Vista Manager Network Appliance (VST-APL), or the software-based Vista Manager virtual deployment option (VST-VRT).

[10] This license is available with AMF-Sec version 2.3.x or later

Ordering Information

AT-VST-APL-06-60
AT-Vista Manager Network Appliance with 6 x 10/100/1000T copper ports and a single fixed power supply (19 inch rack-mount brackets and four regional AC power cords included)

AT-VST-APL-10-60
AT-Vista Manager Network Appliance with 6 x 10/100/1000T, and 4 x 100/1000T/10G copper ports and a single fixed power supply (19 inch rack-mount brackets and four regional AC power cords included)

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